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## (54) CABLE-SHAPED PRESSURE SENSOR AND ITS MANUFACTURING METHOD

### (57)Abstract:

PROBLEM TO BE SOLVED: To form a homogeneous flexible composite piezoelectric body layer by improving extrusion property of a flexible composite piezoelectric body.

SOLUTION: This cable-shaped pressure sensor is formed in such a way that a composite piezoelectric body obtained by adding a ceramic piezoelectric body to a synthetic resin and mixing them and by adding 0.01-0.5 pts.wt. zinc stearate and kneading them, is extruded to form a homogeneous tubular flexible composite piezoelectric body layer 10, on the surface of a core electrode 7 formed by winding spirally a metal wire 9 on a flexible structure 8. A flexible outside electrode 11 composed in a tape-shape by forming an inside metal layer 12 and an outside metal layer 13 on both faces of a flexible support 14 is wound spirally on the surface of the layer 10. The sensor has flexibility and excellent pressure detecting

- 7 芯電極
- 8 可撓性構造体
- 9 金属線
- 10 可撓性複合圧電体層
- 11 可撓性外側電極
- 12 内側金属層
- 13 外側金属層
- 14 可撓性支持体

